

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Mike Boice <MBoice@ix.netcom.com>
Subject: [425] 10 M loops & Gregson kits
Message-ID: <1.5.4.32.19960703195046.006649c0@popd.netcruiser>

Many thanks to all who so quickly responded to my questions about Ramsey & Ten Tec kits, & G5RV antennas. Here are some follow ups:

I thought of using the G5RV as a multiband antenna due to my small lot size. Several of you mentioned using full wave loops on 10 meters, which I can also fit, altho due to being a renter & overhead power lines, the highest up I can put anything is maybe 16 or 18 feet. I'm thinking of putting up a full wave triangular loop, with one side being the highest portion, and the opposite vertex being around 6 or 8 feet off the ground, where it would be fed. I realize this isn't the greatest, but it's the best I can do, and I feel lucky getting away with this much. Anyway, how are these loops fed? I have some 450 ohm ladder line, or I can run RG8X coax the 50 or so feet to the rig. Is a balun necessary, and if so, anyone have plans on winding a small one (for QRP levels only)?

My second question is in regards to kits made by Roy Gregson. One earlier respondent spoke very highly of his NW8020 transceiver and its low price (~\$80). I'd be buying the 10 meter version. Comments?

Many thanks to all,

73
mike
KD0FX
Richland, WA

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Denton Larson <dlarson@ic.waseca.mn.us>
Subject: [435] Antenna analyzers
Message-ID: <199607040024.TAA31783@IC.mankato.mn.us>

Hi All,

I want to thank everybody that replied to my question about antenna analyzers just before Dayton. I took the advice of the majority and got the Autek RF-1. I had hoped to get one at Dayton, but they sell factory direct only. It's a neat unit, did a bit of experimenting and it works quite well. It will get a workout as summer progresses rebuilding the antenna farm from the big blow. (lost the works) BTW, insurance did ok

I guess, but they did depreciate my estimate by 25%, so I had to gulp a bit. So, check your insurance if your expecting "replacement" cost. Anyway,

As the response from others, just wish the RF-1 did VHF. Oh well
72's to all Denton WB0ZUR

WB0ZUR QRP-L #414
Denton K. Larson
dlarson@ic.waseca.mn.us
dlarson@efjohnson.com
71350.1667@compuserve.com

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Brad Mugleston <bmug@gw1.com>
Subject: [409] Antennas West EMail Address
Message-ID: <199607031342.AA00334@gp-ipc97.gw1.com>

Goodmorning,

Does anyone out there know AntennasWest EMail address?

Thank you

de KB0ROL, Brad

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "L. Jeffrey Hetherington" <jhetheri@freenet.npiec.on.ca>
Subject: [417] ARCI Membership
Message-ID: <Pine.SGI.3.93.960703123937.11409A-1000000@freenet.npiec.on.ca>

Hi all. Who should I make my cheque out to for my ARCI Membership?

Tnx es 73/72
Jeff

=====
L. Jeffrey Hetherington - VA3JFF
Niagara Falls, Ontario, Canada
Canadian QRP Award - <http://www.geocities.com/Colosseum/2572/QRP.html>
VA3JFF TMPS 1996 Qs=020 States=15 Confirmed=06 DX=01
CO CA NY IN SD WI TN GA IL TX DC OH NC SC LA (OZ7 UR4)

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Raymond Sommers <rsommers@worf.uwsp.edu>
Subject: [391] Canada Day / cross mode
Message-ID: <Pine.BSI.3.91.960702234724.1453A-1000000@worf.uwsp.edu>

Worked two Ontario stations on Monday during their Canada Day contest.

VE3RM was on SSB above 7.050 and I sent my bk de wb9lkc/qrp via cw.
He heard the wb9 and qrp and asked if I could go down below 7.05 and if I
had a bfo. He went down and called me wb9??? on cw for the contact (599).

Later heard ve3wg on SSB and tried the bk de ... again. He explained that
he couldn't work cross mode but would work cw later. Later heard him on cw
and had a quick contact.

I was amazed that these guys heard my 2-watt bk the first time and was
delighted at their extreme courtesy. Great operators. A belated happy
Canada Day to all our neighbors up north.

~ ~ ~ ~ ~
| | | | |
|/\| |_) (/ the | ,ittle | \ ilowatt \ , uster (Wisc.)
~ ~ ~ ~ ~
~ ~ ~ ~ ~
from ~

Ray Sommers, rsommers@worf.uwsp.edu
WB9LKC QRP-L #8-) qrp ARCI #3816 NorCal #1423

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Philip Karras <ke3fl@access.digex.net>
Subject: [426] Chargers, Gel Cells (Dupe?)
Message-ID: <Pine.SUN.3.94.960703154245.17615A-1000000@access1.digex.net>

Sorry if this is a dupe, been having problems with my mailer...
To those who asked, once again...

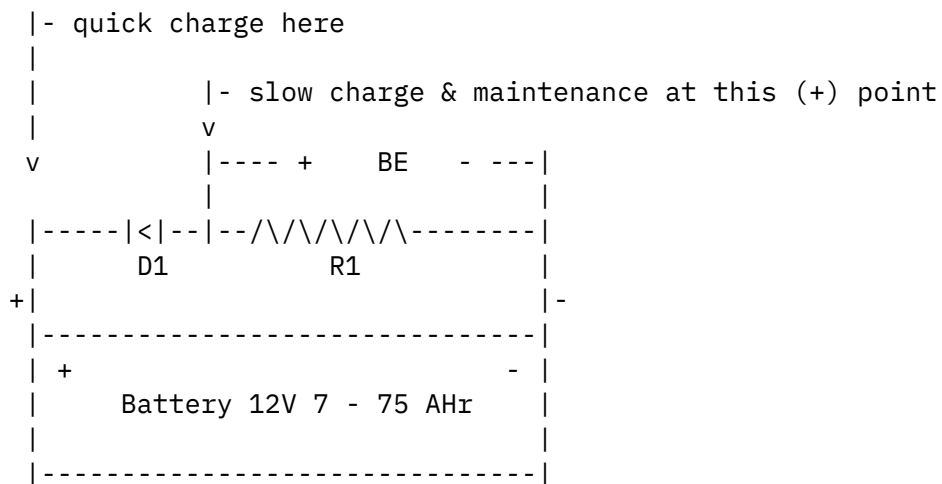
To charge a gel cell (12 volt version) it should be allowed to
go up to 14.4V. At that time it is considered (by the
manufacturers, 14.4 - 15 volts) to be fully charged. With a

battery eliminator type charger you may notice that the charge current continues to drop as the voltage increases. This is a good thing since you don't want to keep forcing 800 ma into your battery when it is fully charged anyway.

Smart chargers measure the voltage & reduce the current so that they keep the battery topped off continually after the battery reaches full charge. If you measure the voltage at this time you may notice it changing from time to time as the unit senses that a bit more current is needed.

Another way to do the same thing is with a resistor/diode accross the battery. Set the diode so that no current flows through the resistor when attached to the battery. Then attach a 12 V battery eliminator (one of which you no doubt have around the house someplace) accross the resistor. In this way the eliminator current is split between the battery and the resistor. Pick the resistor such that its current draw is the same from the eliminator as the battery's when the battery reaches 13.8 Volts. With the diode this should be between 13.5 and 13.8 volts on the battery.

For 7 AHr Gel cells to 75 AHr gel cells I found that 125 ohm five to ten watt resistors work well with the 300 ma @ 12 V battery eliminators (BE) I sell as chargers. (For D1 I use a 1N4001 diode.)



Some experimentation and much patience are needed to find the best resistor to limit full charge current.

This method can be used to fully charge a gel cell. I leave the battery/charger system as shown above for days until it reaches a voltage between 13.5 and 13.8 volts, then place the BE directly on the battery, this way ALL current from the BE goes to the battery. Measure the voltage when you do this and you will notice that the battery voltage climbs to 14.4 volts rather quickly. The battery is fully charged when this happens. Place the BE back into the above configuration for continued battery care, maintenance.

The resistor needed will be different for each BE used since they are all a bit different, even the ones from the same lot like the ones I buy, but if you buy a bunch you will be able to find one resistor value that is good for the majority.

I recommend starting with a 100 ohm five or 10 watt resistor and the diode. This should get you close (about 13.0 to 13.3 volts) then add resistance until the battery is fully charged and continue to measure the voltage for a few days to be sure it doesn't over charge (go above 13.80 Volts when in maintenance mode). I have noticed that in this arrangement even adding a volt meter affects the voltage reading when the battery is close to full charge.

Also, this arrangement works for lead acid batterys but the resistance I use is 150 ohms.

Five watt resistors get HOT with the BE's I use so take care not to touch them for too long a time.

Good-luck and I hope this helps. I am not finished with my experiments but this is what I have found out so far.

72 & 73 de KE3FL/Phil

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996

From: Philip Karras <ke3fl@access.digex.net>

Subject: [424] Chargers, Gel Cellsq

Message-ID: <Pine.SUN.3.94.960703090546.16100C-1000000@access1.digex.net>

This message is in MIME format. The first part should be readable text, while the remaining parts are likely unreadable without MIME-aware tools. Send mail to mime@docserver.cac.washington.edu for more info.

--1920145331-968510533-836399195=:16100

Content-Type: TEXT/PLAIN; CHARSET=US-ASCII

Content-ID: <Pine.SUN.3.94.960703153436.17274B@access1.digex.net>

To those who asked, once again...

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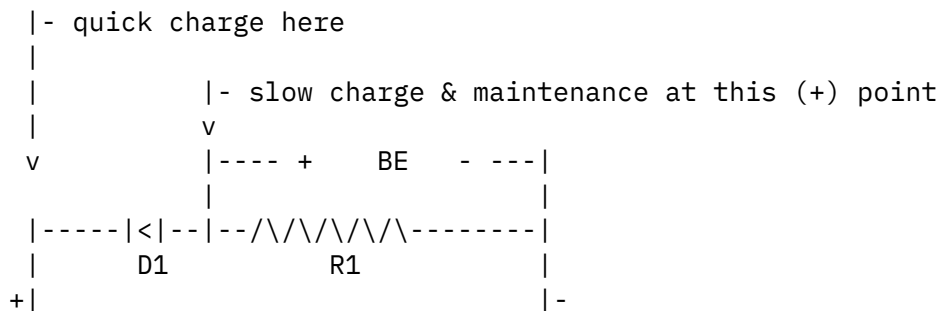
Smart chargers measure the voltage & reduce the current so that they keep the battery topped off continually after the battery reaches full charge. If you measure the voltage at this time you may notice it changing from time to time as the unit senses that a bit more current is needed.

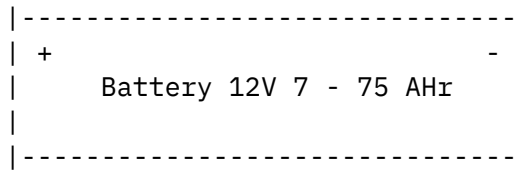
Another way to do the same thing is with a resistor/diode accross the

battery. Set the diode so that no current flows through the resistor when attached to the battery. Then attach a 12 V battery eliminator (one of which you no doubt have around the house someplace) accross the resistor. In this way the eliminator current is split between the battery and the resistor. Pick the resistor such that its current draw is the same from the eliminator as the battery's when the battery reaches 13.8 Volts. With the diode this should be between 13.5 and 13.8 volts on the battery.

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Good-luck and I hope this helps. I am not finished with my experiments
but this is what I have found out so far.

1;2c1;2c1;2cN"xna

--1920145331-968510533-836399195=:16100--

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "Phil Sikes" <psikes@whidbey.net>
Subject: [397] Chicago in August
Message-ID: <199607030645.XAA20284@islander.whidbey.net>

Hi there everyone. I will be in the Chicago area from August 9 through the 14th. Are there any good ham stores to go to in the area? I will actually be staying in the Ft Sheridan area with my daughter and family, but I understand that it's not too far from there to Chi town. If I can get my Norcal 40A finished by then I will try to bring it along, so listen for KJ7NS/9. After that it's off to Oklahoma and my brothers place as KJ7NS/5 until the 18th.

Thanks for any help.

72 - Phil
Amateur Radio Station
KJ7NS
ARCI 9196:NWQRP 412:QRP-L 528
email: psikes@whidbey.net

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "Andrei Morosan" <MOROSAN@lic_dc.ldc.sfos.ro>
Subject: [406] diagrams
Message-ID: <A33A8B490D@lic_dc.ldc.sfos.ro>

Hi,Gang!
73!

Un mesaj pentru Andrei Paraschiv!
Salut,omule am copiat si eu schema ta.Este destul de interesanta!
Cred ca o sa ma apuc de treaba in curand.Mai ai si altele?

Here are the 2 diagrams:
Parts list:

C1 68 pF capacitor
C2 .015 uF capacitor
C3 10 pF capacitor

Subject: Project 2 - 20 meter QRP CW xmtr

Here's the second QRP project taken from 101 EASY HAM RADIO PROJECTS,
by Robert Brown and Tom Kneitel; again, since the book is out of print,
I assume there will be no copyright problems...
This project is a simple 20 meter CW xmtr with output about 100 mw (?).
Here are the authors' comments:
"If you have always wanted to try low-power on 20 meters, here is an
excellent method for joining the growing ranks of flea-power addicts
and doing it inexpensively. This circuit is capable of world-wide
QSO's,
given the right conditions and assuming QRM is not present.
"The transmitter uses a pair of GE-1 universal replacement

transistors

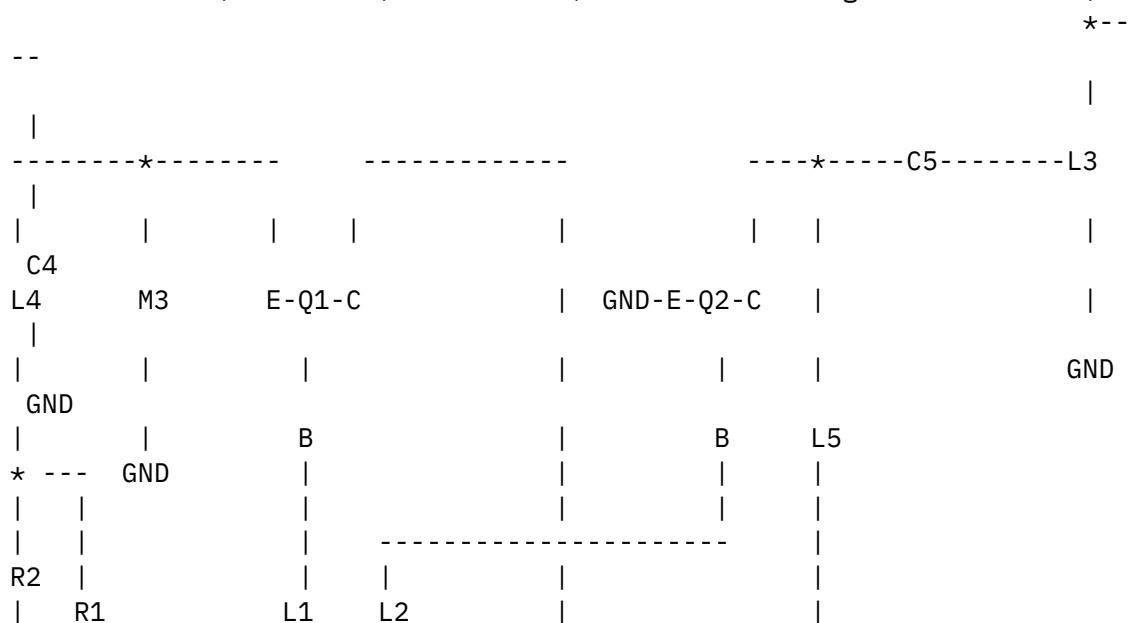
in a unique circuit configuration a great more sophisticated than you would normally expect for an under-one-watt rig. Crystal can be a fundamental 14-mHz type.

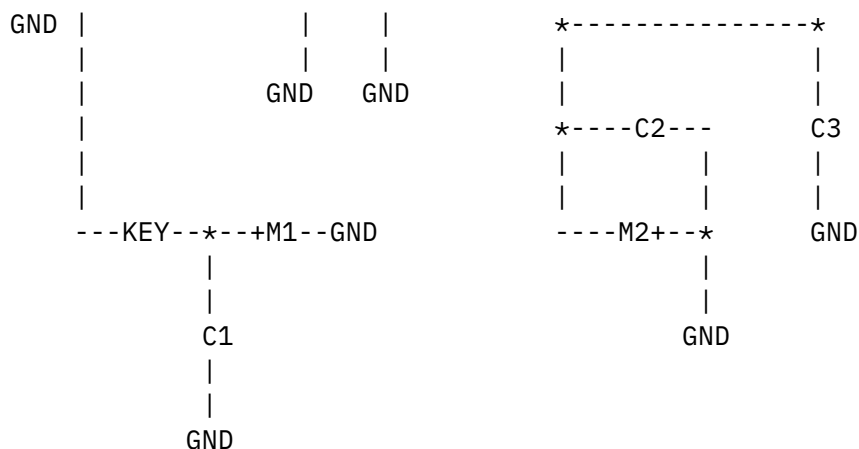
"L1 should be adjusted for sure-fire oscillation every time the key is depressed. C4 is simply adjusted for maximum output on the FSM."

PARTS LIST:

C1, C2 .02 uF capacitors
 C3, C5 .002 uF capacitors
 C4 51 pF variable capacitor
 L1 38 turns of No. 22 enameled wire on a 1/2 in. diameter slug-tuned form
 L2 8 turns of No. 22 enameled wire wound over cold end of L1
 L3 Coil, 17 turns of Air Dux 616T (or equiv.) tapped 5 1/2 turns from cold end
 L4, L5 2.5 mH rf choke (National R-100 or equiv.)
 M1 1.5 volt dry cell
 M2 6 volt battery
 M3 14 mHz crystal
 Q1, Q2 GE-1 transistors
 R1 180 ohm resistor
 R2 1.1 megohm resistor

As before, rather than trying to 'draw' the symbol for each component, I've just inserted the part number. Oh, note the polarities of the batteries M1 and M2. GND = ground, ANT = antenna, E = emitter, ANT
 C = collector, B = base, KEY = well, this is a CW rig....





Note that the collector of Q1 'jumps' over the hot end of L2; this is the only jump. * = a junction of 3 or more leads.

Have fun !

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
 From: jacobson@mail.wiscnet.net (Ed Jacobsen)
 Subject: [401] Field Day summary software?
 Message-ID: <199607031209.HAA23976@gomer.wiscnet.net>

I've been following with interest this qrp discussion group for some time. Since many contributions have concerned Field Day results, may I ask for guidance on PC software for calculating the bonus points and preparing the summary sheet for ARRL? My group, NorWesCo RACES, logged their QSOs on WR9R's FieldDay Logger software. I cleaned the data and ran the summary sheet, only to find that it does not calculate the bonus points earned from regional QSOs. Question: can anyone recommend a software that will calculate bonus points, and, hopefully, import the QSO ASCII file from WR9R FieldDay Logger?

Sorry that this is outside your usual discussion. Is there a more appropriate discussion group for this question?

- - -

Ed Jacobsen
 4900 Dake Road
 Webster WI 54893, U.S.A.
 phone/fax (715)349-2761
 KB9KJE

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Brad Mugleston <bmug@gw1.com>
Subject: [410] G5RV
Message-ID: <199607031403.AA00349@gp-ipc97.gw1.com>

Antenna Wizards,

I have a G5RV suspended above my house and its not doing what I expected it to do (havent got a single complant from the neighbors). We used it for FD for the Novice Tech station and it seemed to work OK but we didn't push it too far (only used it for 40M and 10M)

It must be in my setup. One leg runs N-S about 10' above the roof (abt 35' agl) the other leg runs E-W and drops down to about 10' agl, apex is in the SW corner.

My problem is that It won't tune to any freq lower than about 17M and I don't do much 10M. My son wants to try 30M (the new General soon to be Advanced) and the best we can get is a 5:1 SWR on 30.

This is the layout - The house is a 2 story about 56' long running N-S. There are some tall trees off the south west end of the house but only about 20 feet away.

I don't really want an inverted V on the South end of the house (points the wrong direction) and I all ready have a Inv V Dipole there and It goes mostly N-S with its sigs.

Well I guess thats all for now - PLEASE HELP.

TNX

de KB0ROL, Brad

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Bill Acito 03-Jul-1996 1343 <acito@asdg.ENET.dec.com>
Subject: [421] Hamstick Matching
Message-ID: <9607031750.AA25290@us1rmc.bb.dec.com>

Picked up a few Hamsticks and a large magmount.

I remember a thread a while back about putting a cap in parallel[?] to better the match. I'd like to modify my mount to have a two pole screw terminal with some pre made caps with leads, so when I change bands (sticks), I can change the cap. Cam (KT3A) also suggested a tee connector PL259 with a cap (ca. July 1995), and folks have suggested about 480pf for 40m.

-Does anyone using this configuration have cap values for different whips (i.e. what values are you using)?

-I have an Autek. Is there a method I can use to read the impedance of the antenna as it is for a certain frequency, and then back calculate a cap value to give 50 ohm impedance?

b

. - I own my own words -
Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS qrp-ne qrp-l arci norcal amsat-na arrl-life

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: [438] K7YHA 1996 N. Am. Tour is over!
Message-ID: <19960704.010356.4615.1.k7yha@juno.com>

Hi Gang:

Well we just rolled back into Wilkes-Barre, PA about 15 minutes ago, ending an exciting vacation and QRP Expedition that spanned over 9000 miles!

I'll have all the stats on a later posting, but I wanted to take this time to thank everyone involved and especially the AA4XX & the N. C. Knightlites, and K6MDJ/N6GA and the Zuni Loopers. Details to follow.

Made a few mobile QRP QSOs, but didn't do as well as I had planned. Vehicle noise was a problem and a less-than-optimum mobile antenna. I did manage several 2-way QRP QSOs along with two (2) mobile-to-mobile QSOs, also. KA3WTF was worked three times, once from VE7 land, and twice from

VE3 land. AA4XX was worked once from VE3. Thank God for a VE contest...this gave me some extra QSOs that I hadn't planned on making.....VE5RAC is still scratching his head....worked him mobile in VE7 and then again in VE4.

Zuni FD was A-M-A-Z-I-N-G! These guys wrote the book on how to have a good time. As a matter of fact....I have never had so much fun with my clothes on in my entire life!

72/73 es tn timer to all who tried to contact me. Rest assured we have material for several articles out of this trip.

rich K7YHA

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "Edward J. Warhover" <kf9xy@apci.net>
Subject: [405] KC2 Keyer
Message-ID: <199607031340.IAA09518@hilly.apci.net>

Someone requested some info on the Norcal KC2 Keyer, which I mentioned in a post a couple of days ago. Sorry I accidentally deleted the message, so I'll post this to the list. The KC2 is a digital readout keyer/frequency display/swr meter/code speed indicator/etc. It will be a Norcal club project, after which it will be sold by Wilderness Radio.

73,
Ed Warhover

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: WJ4PRandy@aol.com
Subject: [416] Knightlite FD photos...
Message-ID: <960703123104_426901105@emout12.mail.aol.com>

Is it just me or does the pix of
WJ4P operating 80mtrs show a
guy with sort of a cross-eyed
"I've been doing this too long"
kinda look? :*)

73, Randy WJ4P

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: WD6BOR@aol.com
Subject: [388] Livermore and Norcal this Sunday
Message-ID: <960703000617_569008109@emout14.mail.aol.com>

To the group,

Some of the members of the Valley of the Moon ARC (who also belong to Norcal) will be at the Livermore swap selling the last of Frank Jones's, W6AJF, electronics "stuff". There will be lots of non-QRP calling frequency crystals (mixers, filters, use your imagination guys), air variable caps, trimmer caps, antenna stock and hardware (aluminum!), and whatever else we can get loaded into about three trucks.

I'll try to have a Norcal patch or some other identification out for you to see, so identify yourself as a Norcal or QRP-L member (say the magic word "QRP") and walk away with a very special discount, such as all you can carry for a pittance. Whatever parts and hardware that don't sell and make it to the meeting will be yours for the taking, so be sure to make it to California Burger after the swap. Whatever we collect at Livermore will go into the VOMARC kitty.

See you there and don't be shy!

Darrel, WD6BOR

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Bob Finch <bfinch@vet.purdue.edu>
Subject: [415] logging programs
Message-ID: <199607031537.KAA13876@vet.vet.purdue.edu>

i just got a 286 complete w/ spare hard drives fer
a 20 spot.....got all the viruses cleaned up and
have been looking at sum software for logging

what i want is a loggin program that does the FULL
arrl style log sheet, at least as far as information.
i.e. not just the time on (start) of a qso, but also
the completion time. it shud also be field flexible
(i.e. not demand that i enter sumthing in a field
b4 it will allow the record to be saved)...and finally
be generous on remarks and search abilities.....

of course this shud cost very little.....

if yall know of this gem, please let me know.....
if i am asking to much, please let me know.....
if u think i am being pushy...please flame me.....

obqrp.....login into my local traffic net on 80
is getting harder w/ the summertime noise.....
sumtimes have to qro it.....sad but true.....but
it is fun to check in w/ one watt.....

tnxs in advance.....
baab
n6cxb

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: wdzeares@rockdal.aud.alcatel.com (W. Dennis Zeares)
Subject: [412] mailbox empty: no QRPP
Message-ID: <9607031444.AA19000@aud.alcatel.com>

The snail mail to my part of Dallas is very slow...
still looking for the June QRPP...
anyone else still waiting?
72/73 dennis k3ets

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Bob_Tellefsen-CNSE97@email.mot.com
Subject: [422] Missing digest
Message-ID: <M940456.075.ze81m.1.960703190254Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Will someone please tell me how to download yesterday's digest?
For some reason it didn't show up today.
Please reply direct, otherwise I won't see the answer until tomorrow's digest.
Thanks,
Bob N6WG

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "Ted Kell" <tkell@130.253.192.68>
Subject: [403] Operating in wilderness areas
Message-ID: <9607031333.AA21771@nyx.net>

I have a question for all those QRPers that like to backpack their rigs into the woods and operate. I guess this would be members of the ARS.

A little background first. At the Dallas Hamfest, I purchased the new ARRL Extra class study guide. I noticed the following quote on page 1-7. It is the second paragraph.

There are certain conditions that may restrict the physical location of your amateur station. If the land has environmental importance, or is significant in American history, architecture or culture you "may be required to take certain actions prescribed by §1.1301 -1.319 of the FCC rules." [§97.13 (a)] For example, if your station will be located within the boundaries of an officially designated wilderness area, wildlife preserve or an area listed in the National Register of Historical Places you must submit an Environmental Assessment to the FCC.

So how about it, have you operated in a wilderness area? Have you submitted the "Environmental Assessment to the FCC"? What form did you use, where did you get it, and what was the result?

Inquiring minds and all that rubbish.

Ted

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Dave Matthews <dmatt@roch875.mc.xerox.com>
Subject: [434] Power Supplies
Message-ID: <9607032345.AA14743@chip>

So far so good. I have gotten some good pointers from this group. I finished my Explorer tonight. My 7 year old was my building helper. Sometime over the holiday I hope to get it lined up and put up an antenna.

Now I need to come up with a power supply. What do people commonly use? Bike/car battery? Filament transformer into a bridge and caps with a single chip regulator? What regulator chip is popular nowadays? It has been a while - 7812's were about as good as you could do last time I built a supply. A 7812 with 2 diodes under the ground lead would give

me about 13.4 - close enough.

Dave

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)
Subject: [432] RTTY/QRP+/20METERS & UP
Message-ID: <199607032312.TAA30126@nss2.CC.Lehigh.EDU>

Hello Gang,

I got no replies from my last post on rtty on 20 meters using a QRP+. Has anybody done this? I am using a KAM, and that is half of the problem. It seems that the KAM will invert the receive signal but not the transmit. So now my question is which brand and model of TNC will invert both signals?

73 de AA1IK
Ernie

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [418] S&S DVFO Review [Long]
Message-ID: <199607031647.QAA29527@chuck.dallas.sgi.com>

Gang,

While in Dayton, there was a lot of new stuff being shown and I guess a lot of money exchanged hands. :-) On this topic it is interesting to note the scale of economy and the jockeying for our (the radio amateur community) money. Since Dayton moved one month later a lot of hamfests around the country have moved or are planning on moving their dates to BEFORE Dayton in hopes that we, again the consumers, will have some money in hand and use it up before we go to Dayton.

Anyway I purchased a TAC-1 for 40M and hand carried it home from Dayton and several weeks ago I was in the process of building it when a package arrived from S&S Engineering. This review is about that package. Now I can get back to the TAC-1 in time for the start of the fox season and

be able to get up to 7.122MHz and work all those crystals that came by my doorsteps that will appear in 40-9ers. :-)

-----cut here-----

DVFO - Digital VFO with DDS
Review by Chuck Adams, K5FO

DVFO - Digital VFO with DDS
Manufacturer: S&S Engineering
14102 Brown Road
Smithsburg, MD 21783
(301) 416-0661 (voice)
(301) 416-0963 (fax)

Kit Price: \$139.95 + \$5.50 shipping and handling
Assembled: \$189.95 + \$5.50 shipping and handling

Manufacturers Specs:

Frequency Range:	1Hz to 16MHz
Frequency Resolution:	1Hz over full range
Output Level:	0.6V p-p (600mV p-p)
Supply Voltage:	7-14 VDC
Supply Current:	175mA
Overall Size:	5.25" x 1.9" x 1.0" (WxHxD)
Spurious Outputs:	-60dB typical, -50dB minimum
Accuracy:	Can be set to <1 PPM

Features:

- o Programmable display offsets
- o Accomodates "backward tuning" rigs
- o Suitable for Direct Conversion Receivers
- o Output Protected
- o Detented Tuning
- o Tuning Steps - 1 Hz to 10 MHz
- o Supertwist Liquid Crystal Display
- o Subminiature sockets/pins on output
- o Mounts via the toggle switches. Only two holes - No Screws

Future Options:

- o Non-volatile memory for frequency & offsets
- o Precision digital memory keyer

This kit comes with all the parts and a 14 sheet 8.5x11" manual with many pages printed front and back and the schematics and parts layouts only one-sided (a feature that I love, so that I don't have to page back and forth on the back side :-)).

Now I know you can look me up in the FCC database, so I'll just say that I am just over 50 years of age. I wore glasses all my life until age 40 and then I had 20/20 sight until a few years ago when I started wearing reading glasses. So my eyes aren't that bad. I bring this up for a reason. This kit uses SMT, surface mount technology, and as someone mentioned in a posting in the last few months. The small caps and resistors look like grains of rice. Really slightly larger but the parts are small and the markings on them are done with lasers. So you will need very good eyes and a good magnifying glass or other optical aid(s).

Dick and Kathy provide you with one extra of each SMT part just in case you lose one into the carpet or wherever little bitty (TX talk) screws, parts and things go when they escape from your line of sight (LOS). So now I have this envelope of SMT parts that I will probably never get around to using but can show all my non-dweeb friends just how small electronic critters are that I work with. [Try to explain to someone how much power 1W is. :-)] I tell them it's not enough power to run a fire-ant's motor scooter and I try to talk to other people with less power than that.]

The manual spends the first two pages with excellent tips on building and a detailed intro on installing SMT components. Dick Szakonyi has already installed the SMT IC with all the little legs. The one with 44 pins.

In other reviews and discussions over the years I've talked about using my favorite Ungar tip on Weller irons and have given the part number. Fortunately for me I own another Ungar iron with the tip it came with and it had the perfect tip for this kit. The tip that use for other kits would not do for this kit. First, use an iron with a grounded tip. Follow all the static discharge procedures for working with CMOS otherwise you'll be in deep yogurt, i.e. you'll have a non-functioning VFO when you get through. The tip is a very very very fine tip, which you'll need to work with the SMT pads and soldering the SMT parts in. This is not for anyone but those of steady hand and patience. I like to think of it as being a brain surgeon on an electronic part. I'm not trying to scare anyone away from this kit. It just requires an increased level of awareness of what you are doing and experience does help here. Follow the instructions and you shouldn't have any problems. Do not install any SMT IC in backwards. I don't even want to think of this problem. It is left as an exercise for the reader.

The recommended iron by S&S is the ANTEX C/3U part no. 596IR014 (~\$22) with tip 596TI076 (~\$4) and stand 596S0010 (~\$10). Phone number is 1.610.941.2400. (Note the influence of the dweeb stuff :-)) This notation for phone numbers has been done in Europe for ages.

I didn't time this kit. Sorry. It don't think that it was more than three or four hours. I did it over a period of a week because of work etc. It was a joy to do and a new experience for me on building a kit. It's not that many parts that are SMT out of the total number for the VFO.

I used the usual 63/37 solder with organic flux and defluxed the board (the back side) with warm water and the old trusty toothbrush. (kids - not the one I use on my pearly whites :-)) . If I do say so myself the boards that I do look like they were wavesoldered, they're that shiney. IMHO. It's not so much what I do but the fact that 63/37 works so well for me.

So now comes the real test. I anxiously get out the magnifying glass and check to make sure that I soldered every part and didn't make any solder bridges (in all the kits that I've done I've never done this, really). I used 0.031" solder and for this kit if I had it I would have used 0.020" diameter solder. I learned early that too much solder is bad and that I learned from my dad. [I really think that either directly or indirectly my dad had a lot to do with my interest in building. The last thing that he built and designed from scratch was a complete SSB tube xcvr with 2-2E26's in the finals. It was truly a work of art, especially the shielded cage with the finals submounted in the chassis. I still remember it like it was yesterday.]

So I don't find any problems and I get the 12V gel-cell and then proceed through the test and alignment procedures. Everything worked the first time.

This is a very fine quality kit from S&S Engineering. One of the future options you'll want to get is the non-volatile memory. Without it you have to reset the offsets on each power up. Not a biggie to me but some people want it all and can get it but that'll be later. I don't know what the price of the option will be but the board seems to be already laid out with that in mind. The kit is a great kit and will make an excellent starting point for some designer to use for a multiband multimode rig.

The only thing that I might have changed doing this kit is the connection of the display panel to the main board. The way it is done is just fine, but if a problem were to arise the front panel would be difficult to remove as a number of straight wires are soldered point to point on one edge thus making it mechanically rigid and thus

difficult to work under. There are not that many parts under it, but just make sure that you double check everything that is under the display panel before installing same. I did not have any problems but when building any kit and reviewing same I look for things that anyone might have trouble with. A flex cable/wire would be nice but the cost to have this premade would increase the cost of the total kit. This is truly a minor minor point that I bring up. I talked to Dick on the phone and he says that you can bend the board up and look under it and get to everything but the IC, so that's fine.

This review to appear in more detailed format in QRPP (if Doug takes it). I haven't listed all the uses for the VFO that I have thought about and done. :-) Teaser if I ever saw one.

You remember that just after HamCom I posted the Tektronics signal generator that I found. Although the S&S Engineering VFO only goes to 16MHz it will most likely replace the Tek. Several reasons for this. I can easily attenuate the output to the small levels required for testing receiver sensitivity. Also for the present time I don't need anything above 16MHz anyway. And most importantly I can readout the frequency exactly for any fine resolution measurements. Otherwise I was going to have to use an additional freq meter to do experiments. This simplifies the tests significantly.

When the DVFO is used as a VFO you can account for LO high or low frequency offsets and the tuning direction with this function provided by simply going through a small menu from the front panel using the dial. The tuning rate is done by pushing the front button to move the cursor position on the display to the digital position you want to vary, say the 1KHz position, then tuning will be done in 1KHz increments.

Well, that outta wrap up it for this trip kids.

This unit was sent to me by S&S Engineering for evaluation for what I think of SMT being in a kit. I have returned the unit to them with a check for new one. My many thanks to Dick and Kathy for doing this without asking. Many of us review kits that we have purchased and I have done this many times on this group in the past. My review has not been influenced by this gracious act of kindness by Dick and Kathy. I firmly believe that if one writes up a review and you have been given something for doing it then you should include that information in the review. Thus I am doing so. I note that there are reviews in magazines where this is not done and I think that is additional information that should be included. I also think that one should not sell the kit afterwards either. It's just a personal thing with me. Duely noted by this author.

On the topic of SMT in kits. I think it is fine for caps, resistors,

and three legged pots. The ICs may be a different story and my recommendation for any kit manufacturer would be to do the ICs if possible to reduce the likelihood of problems with same. It remains to be seen how many hams and kit builders will have the small enough tip to do SMT. SMT certainly reduces the space required but increases the tolerance requirements, thus the expense, for the board manufacturers.

Like I said I have paid for the DVFO for my own personal use and plan to use it for other projects in the works.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com

K5FO Tmps 1996 Qs=043 States=22 Confirmed=11 DX=02 (0.95W)

AL AZ CA CO DC FL IL IN MD MI MO NC OH OK OR SD TN TX UT WA WI WY

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996

From: WD6BOR@aol.com

Subject: [389] Special Event Station N6S on now

Message-ID: <960703000628_569008085@emout12.mail.aol.com>

To the group,

Just thought I would post another note to let everyone know that the Valley of the Moon ARC in Sonoma, CA will be operating a special event station through July 9. Band is dependent on who's operating that day or night, but the frequencies are in the June QST. For those of you who file as well as I do and can't seem to locate that issue, the frequencies are:

CW: 3.530, 3.560, 7.030, 7.040, 10.110, 14.030, 14.060, 18.078, 21.030, 21.060

Phone: 3.930, 7.245, 14.270, 18.138, 21.370

RTTY: 3.625, 7.082, 10.132, 14.082, 21.082

QSL with a SASE to: Ken McTaggart, N6KM

402 4th Street East

Sonoma, CA 95476

We've been passing the call around the club members, with several of the operators being Norcal members. I'll be operating Friday and will try to spend a little time on the 40 meter QRP frequency, but you've got to promise not to laugh at my code speed or fist.

72 es 73, Darrel, WD6BOR

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [431] TMPS reposting
Message-ID: <199607032229.WAA00830@chuck.dallas.sgi.com>

Gang,

Since a new group arrives on the list weekly, here is the previous post about the 30M propagation study, a.k.a. TMPS.

Dates: May 1, 1996 0000Z to August 31, 1996 2359Z
Band: 30M (10.100 to 10.125MHz CW; 10.125-10.150 Digital)
Preferred CW range 10.115 - 10.125MHz Why this range? Last year saw commercial 10KW stations on 10.106, 10.108, and 10.112 for starters, so maybe up high end of CW part will work.
EU 10.116MHz QRP calling freq is in this range.

Hours: 24 hours a day
Power: QRP and QRPP levels

Purpose: Check out 30M. This is a propagation study. Not a contest. Everyone starts out at zero. You get bragging rights for your accomplishments. You make up your own quantitative measure: WAS count, DXCC count, WASTP, best miles/watt, qrp-1 members worked, beacons heard, most QSL collected, Your goals and your challenges. Experiment with antennas. Look for K4TWJ. Look for NN1G. Anyone. The list boggles the mind.

No schedules, no announcements, and no fox hunts please. Every man, woman, and child for themselves. No complicated or even simple scoring mechanism to clutter the desk or to look up.

My goals: AK, DE, ND, NV, and **RI** (you hear me Lee?)
Inside joke from last year. Lee being W5TEH in RI.

Who Plays: Anybody. There will be a quiz at the end.

This is not a contest. This is to get you on the air.

Novices and Tech+ we want you on 30M with us. We miss you.
So work towards that upgrade ASAP.

For those new to the list. This list is not a contest club.

It may seem like it with all the things going on.
It may have seemed like it with the foxhunt, but truly
it is all friendly interplay to generate on the air
activities. Keeps some from getting bored. :-)
We can't play pro-sports so we do the next best thing -
beat on each other. It's all mental gymnastics and
exercise.

Be sure to send to LISTSERV@LEHIGH.EDU the following
in the body/text of the message

RUN QRP-L X GETNR callsign

where callsign is the one you signed up on the list
with. You'll get back a permanent number and you
can exchange this on the air with fellow QRP-L
members.

Don't give up on propagation, create it. :-)

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO TMPS 1996 Qs=043 States=22 Confirmed=11 DX=02 (0.95W)
AL AZ CA CO DC FL IL IN MD MI MO NC OH OK OR SD TN TX UT WA WI WY

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [428] Tv1
Message-ID: <v02130500ae009b5d4c5e@[198.60.91.132]>

Will be in Florham Park NJ from 7/8 - 7/12, anybody want to get together ?

Niel Skousen, WA7SSA nskousen@scientech.com
SCIENTECH Special Projects 208-525-3742, 529-4721(FAX)

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [430] Warning Announcement [long]
Message-ID: <199607032230.WAA00839@chuck.dallas.sgi.com>

Gang,

```
#      #      ##      #####      #      #      #      #      #      #####
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```

I hate doing this, but this had to be done and it has the approval of the listmeister and a on council from a legal expert if you are now reading this for the first time on the QRP-L group. de K5FO QRP-L #1<--- Used sparingly.

This posting is caused by more than one individual causing others problems by sending email to management about their activities on this group and other groups. Let's not start flame wars over this, it's just like jammers on two meters who get off on the attention. This will not be the same case. IMHO.

You know it's gotta be good/bad if I bring out the #1 Gold badge and start flashing it around. :-)

"1984" by George Orwell. A novel written about government control and this novel used to be required reading in all Senior English courses in most the USofA at one time.

"TXH-1138" - the movie. A movie about government control of a large population underground due to a nuclear war at one time and forced drug and mind control techniques and the escape of one member of this population.

I hope you have read one and seen the other. This notice is not about government but about individuals and their behaviour and tendencies to control others and what they do.

In "1984" the major theme was big brother watching you. This novel was written before 1961 but seems now to be very apropos, thus the writing of this warning message.

It has been brought to my attention by too many members of this group that such a thing is now going on by members of

this group who seem to have too much time on their hands or a bad attitude. Here is how this affects you in a negative manner. IMHO.

The following list is in no particular order and not in rank of any importance or classification.

1. The Internet works totally on a system based on a lot of resources (including but not limited to hardware, software, personal time, professional time, ...) provided by government(s), educational institutions, commercial companies, network providers, and individuals. At the present time (and Heaven help us if this changes) all this done without some big bean counter keeping track and charging us all for this. It's everyone helping everyone else to keep the system going. There are enough people standing in line already to get rich off the Internet.

2. We all contribute to this group (QRP-L) in some of form. Either through postings, reading of the posts, private email, etc. This group was started over three years ago and has survived this period of time and we all should take pride in that. The S/N ratio is pretty high despite what some would think. We have those that want to split it up. Won't happen. Maybe other providers will come along and splinter of SIGs (Special Interest Groups), but hopefully what makes this group great is it's diversity.

Aperiodically we get into relatively minor flame/discussion sessions, but hopefully for the intelligent growth of the group as a whole. It is part of life and societal behavior.

3. We all do this on our own, with and without the support of others. We hope it is for the betterment of the hobby and our enjoyment of same.

Now here is where the problem now exists and what I want to eliminate either through voluntary behavior or in the case of hardheaded individual(s) through forced action(s). We are talking ZERO-TOLERANCE here folks. ZERO. NADA. ZILCH. Problems will be resolved immediately and with no appeal process.

We seem to have among us a group of individuals who continue to cause others problems. It does not make one hill of beans difference why. Civilized behaviour is expected. Uncivilized behavior will not

be welcome here. End of discussion.

I have done a lot of posting to this group. Maybe more that I should, but I do this on my own personal time, either after hours or during breaks or lunch etc. You've seen me go away for periods when I don't have any free time. It is between me and my employer as to how we account for this and if I'm not doing my job then I'll be terminated. We all work under the same guidelines etc. I am not about to risk my valuable position for my livelihood. We all do this. So we don't need the self-appointed net police trying to do this as our own conscience. I put in over 60 hours a week sometimes and I don't nitpick my employer and the converse is true. I sleep well at night.

So it seems that we have a group of individuals who do the following. They monitor the posts. They note the time stamps (which don't amount to much due to technical delays etc.). They then proceed to send messages to your employer and mine noting that so-and-so is using resources that the company is paying for on personal time, etc. or using government/educational systems at cost to the taxpayer....

This does a lot of nasty things. Too long to mention all of them but the obvious come to mind. a) A manager with no sense of humor may get involved. b) An irritation to all involved. c) Lots of grief. and so on and so on.

I am reminded of the line in the song "MTA" by the Kinston Trio - "this could happen to you". If it does, let me know.

Censorship - the institution, system, or practice of censoring

Censor - to examine in order to suppress or delete anything considered objectionable

This group is an unmoderated group, i.e. one in which neither I nor anyone else deletes what is sent to the group. Neither I or Jim Eshleman have done much to control the group. Only one person to date has been deleted from posting to this group due to numerous complaints and their failure to behave in a civil manner. The mechanism is in place and has worked beautifully.

So if you or anyone you know is having difficulty with the above group let me or Jim Eshleman know with appropriate documentation or copy of email or electronic transaction(s). Appropriate action will be taken to have the offending party removed from interaction and subscription to this group permanently and immediately. Anyone who gets requests to obtain the qrp-1 archives should check to see if this party is one of the

offending parties. Let us know if your postmaster or management receives email 'turning you in or complaining' and send a copy to me.

For those who are causing the problem(s) and you know who you are you are now on notice. Zero-tolerance is now in effect. The use of this group is a priviledge and an honor. Behave accordingly.

Now this probably immediately seems like a big brother control situation to many. I hope that it doesn't appear this way. You fight fire with fire and I see no other recourse. We could publicly embarrass the offending individuals but they'd love the attention anyway.

I want this group to grow and sometimes you gotta trim the weeds around the rose bush. :-) Consider this a trimming exercise. I don't want to do it but I will just to save the group as a whole. I don't want sharp minds that contribute to this group to be worried that someone is going to cause them grief. We need all the help we can get here.

Sorry for the bandwidth gang but it was something that you outta know about. Any hate mail is subject to posting to this group. I'm certain that noone wants to have the big plug pulled on this group.

dit dit es cul QRP-L #1

--

Chuck Adams (K5FO CP-60) adams@sgi.com

K5FO Tmps 1996 Qs=043 States=22 Confirmed=11 DX=02 (0.95W)

AL AZ CA CO DC FL IL IN MD MI MO NC OH OK OR SD TN TX UT WA WI WY

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996

From: "Frank" <g3ycc@enterprise.net>

Subject: [419] Your ideas needed!

Message-ID: <199607031820.SAA14433@mail.enterprise.net>

I am still looking for tips, ideas, gadgets whatever, to add to my web page. Beginners really appreciate these hints and kinks - have you any to pass on?

Also still URGENTLY NEED pics and run down on gear you have built, circuits etc. Please help if you can

Bye

--

Frank G3YCC

Ham Radio QRP Web Page:

<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [411] Re: "Independence Day" the movie
Message-ID: <Pine.OSF.3.91.960703100208.10989A-100000@saturn.acs.oakland.edu>

On Tue, 2 Jul 1996 WJ4PRandy@aol.com wrote:

> Morse Code and "hams" play an important
> part in the movie role in the movie "Independence
> Day".....

Weak plot, no character development, wall to wall action. Great summer mind candy! I just kind-a rolled my eyes at the ham radio angle, plus those sloppy fists and STRAIGHT keys. Will Smith (aka The Fresh Prince) was far better than I had ever expected him to be. He got all the good lines and only real laughs of the whole film. He delivered two great lines one after another but the second line gets lost in the theater laughter.

OTOH (on the other hand) The Hunchback of Notre Dame could very well be the first animated film to WIN best picture. I've seen it twice and bought the soundtrack (VERY VERY rare for me to do that).

WHOOOPS! Thought this was the current-movies listserver ;-)

ObQRP: WB8ZJL will be operating from the cottage this weekend, 7.040 in the evening. Everyone have a GREAT and SAFE Independence Day.

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: WJ4PRandy@aol.com
Subject: [407] Re: "the movie"
Message-ID: <960703094321_426796782@emout19.mail.aol.com>

Guess I need a sentence structure checker..
Looked at my post this a.m. and discovered
I made about as much sense as .. as... well
you get the idea!

Sorry to babble. Hope you guys got the gist
that morse code and hams played an important
role in the movie..and I'm sure some of it was
QRP! 8-)

73, Randy WJ4P

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Kevin Bunin <p014455b@pbfree.net.seflin.lib.fl.us>
Subject: [437] Re: Chicago in August
Message-ID: <Pine.3.89.9607032001.A5475-0100000@pbfree.net.seflin.lib.fl.us>

I believe Erickson's Communications is the most well known ham store in Chicago proper....it used to be affiliated with AES.

AES is just up the road in Milwaukee, WI .. worth a visit. Hope this helps.
73 de KB WV5Z

Kevin Bunin
p014455b@pbfree.net.seflin.lib.fl.us

On Tue, 2 Jul 1996, Phil Sikes wrote:

> Hi there everyone. I will be in the Chicago area from August 9
> through the 14th. Are there any good ham stores to go to in the area?
> I will actually be staying in the Ft Sheridan area with my daughter
> and family, but I understand that it's not too far from there to Chi
> town. If I can get my Norcal 40A finished by then I will try to bring
> it along, so listen for KJ7NS/9. After that it's off to Oklahoma and
> my brothers place as KJ7NS/5 until the 18th.
>
> Thanks for any help.
>
> 72 - Phil
> Amateur Radio Station
> KJ7NS
> ARCI 9196:NWQRP 412:QRP-L 528
> email: psikes@whidbey.net
>

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: DYARNES@aol.com
Subject: [393] Re: G5RV antenna
Message-ID: <960703023351_569084057@emout17.mail.aol.com>

Hi All,

For years I've seen articles and commentary back and forth about G5RV's and what they do (or seem to do). However, not many of these articles really documented this antenna's characteristics until a year or two ago when Bill Orr, W6SAI published some very interesting info in one of his magazine articles. I can't for the life of me find that article (somebody help me), but not to worry. Orr recently published a great new antenna reference which contains this same data. The book is called The W6SAI HF Antenna Handbook.

There is a very good discussion of the strengths and weaknesses of G5RV's which everybody contemplating constructing such an antenna should probably read.

Orr analyzes a G5RV constructed as follows:

1. 102' center fed flattop (sorta' flat--see below)
2. 28' 300 ohm feedline section
3. 1:1 current balun
4. 50 ohm coax for the rest of the feedline
5. Antenna at approx. 30' on each end with a 45' center height.

I think the above is pretty much the standard configuration for G5RV's, at least as to measurements.

Orr then measured the SWR at approximately 100 khz intervals (200 khz on 10 meters) across all the HF bands and got the following high and low readings:

BAND	LOWEST SWR READING	HIGHEST SWR READING
80m	4.47	6.30
40m	2.65	4.50
30m	8.50	
20m	1.83	3.28
17m	1.84	
15m	5.66	5.98
12m	4.52	
10m	1.88	4.83

For the most part, these are not inspiring numbers! True, as we have heard many times, SWR is not as critical as many would have us believe. However, clearly this antenna would not function at all on some many (if not most) frequencies with many of today's transceivers unless an ATU is also in line.

That enables you to get a match, but not without substantial losses.

If you are going to use an ATU (which I heartily recommend), then you might as well forget the coax and just use balanced feeders. Losses go WAY down, and I can tell you from experience that you will have a much better performing all band antenna.

Isn't this why we all built those ST. Louis Tuners???

72 de David W7AQK

BTW, my handy-dandy, super whammy whizbang, I built it myself St. Louis Tuner worked like a dream during Field Day with just such an antenna setup. I used 450 ohm line, but I'm sure 300 ohm would have worked just as well.

D.

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Rogerio Gonzaga <gonzaga@med.up.pt>
Subject: [398] Re: G5RV dipole
Message-ID: <199607030834.KAA27261@hipocrates.med.up.pt>

In a message dated 96-07-02 15:12:24 EDT, MBoice@ix.netcom.com (Mike Boice) writes:

>Anyone here have experience with a G5RV dipole? I can just squeeze on onto
>my lot, and was wondering what people thought of it. I do have one=
specific
>question about it: one book says feed it with 300-600 ohm ladder line
>(fine, I have some 450 ohm) cut to a "quarter or other odd wavelength at 14
>mHz." Another book says to cut the line to 34 feet, then feed with 50 ohm
>coax.
>
>Any real world experiences?
>
>thanks,
>
>mike=20
>KD0FX
>Richland, WA

Hi, Mike and gang,

I have been using a homemade half-size G5RV to work as /P,
while traveling or in hollidays.=20
It is made with big gauge insulated wire and 450 ohm ladder line

(canibalized from an old Drake antenna), connected with ordinary electrical connectors. On the lower side, a female PL59 finishes the no-balun system. With an ATU I can tune all bands from 28 to 7 MHz. My chief experience has been in the beaches of Algarve (in the Southern part of Portugal), where I generally spend a couple of weeks every summer. I generally hang it flat-top at about 4 to 5 meters AGL (the ladder line has often had to be bent), always buried in trees, buildings, and so on. I have been able to work in the 20 meters CW all Europe and most Americas, sometimes Africa, with 4 watts QRP (MFJ 9020). Using QRO (40 Watts with my old Atlas 210x, power shame...), last year, I could work almost every morning NZ and/or VK at the lower segment of 7 MHz CW, overtaking other European stations with much more power and supposedly better aerials... Some 3 years ago I could work Indonesia in the 15 meters CW, with about 15 Watts, with the antenna at less than 3 meters AGL, and most of the ladder line lying horizontally less than one meter over the ground.

Please do not use TV 300 ohm line if you want a permanent and durable base system, it probably won't last more than a couple of years.

Although the "antenna-gurus" tend to be quite reserved about the qualities of the G5RV, the time test has confirmed it as a valuable multiband and I am very happy with mine.

72/73 de Roger, CT1ETT

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: na5k@juno.com (Smitty Smith)
Subject: [396] Re: Half-Square Antenna
Message-ID: <19960703.013455.4094.2.na5k@juno.com>

On Tue, 2 Jul 1996 16:37:44 -0400 KFGlynn@aol.com writes:

>Hi Smitty,

>

>How did you feed it at the bottom of one of the legs? Thought it was
>to be fed at one of the corners with coax or ladder line?

>

I believe that the original half-square was actually half of a bob-tail. The bob-tail is like two half-squares end-to-end with 3 hangy down wires instead of two. It was fed at the bottom of the center vertical wire. This apparently was transferred to the half-square, which was fed at the bottom of one of the vertical wires. The impedance is quite high and 450 ohm ladder line was needed with a tuner. BTW, there was no counterpoise, the other side of the twinlead or ladder line just dangled. I did tie mine to the tower because it seemed like the right thing to do :-)

The better feedpoint is at the corner where the impedance is closer to 50 ohms. This is proven out with the modern day antenna modeling software.

CUL,

Smitty, NA5K

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Peter Barville <peter@barville.demon.co.uk>
Subject: [429] Re: Hamstick/magmount
Message-ID: <p4o5bAA0\$r2xEwbs@barville.demon.co.uk>

In article <960702111634.202034e9@carib.vf.mmc.com>,
JEVERHART@cayman.vf.mmc.com writes

>

>Seriously, I've used 20, 30 and 40 meter Hamsticks with a "single element"
>magmount when I was stationary. But at highway speeds the windload made the
>magmoung slide across the car roof. That does *wonders* to the paint job. The
>six meter antenna may have less windloading, but I prefer to err on the
>side of caution.

Forgive me for asking, but are Hamsticks the same as what we in the UK
know as Pro-Am Whips? I've been using Pro-Ams (40/20/17m) for hf mobile
for some time now, and have been pleased with their performance.

I ask, because I never see any mention (from the States) these days of
Pro-Ams.

Best 73

--

Peter G3XJS

peter@barville.demon.co.uk

"It is vain to do with more
what can be done with less"
William of Occum (1290-1350)

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "MSGT CAM BAILEY" <CBAILIEY@PAMDT.ANG.AF.MIL>
Subject: [400] re: Jogging the Spartan Sprint
Message-ID: <heH8+WXZq1B@PAMDT.ANG.AF.MIL>

Gary,

How fast the op send depends on which contest is running.

Were you around for the Fox Hunts on 40 meters?
There was a lot of discussion on CW speed during then.
Efforts were made to accomadate the Novice/Tech plus on 7.110.

I find I'm rusty if I'm off for a month or more. That includes sending, as I've only been using an iambic keyer for 2 years now. I find it difficult to QRS with the keyer, so I switch to a straight key for QRS.

Hang in there, I'm willing to QRS anyday.

72 kt3a

211 EIS, NCOIC ELECTRONICS

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Grover <SIXPENCE@worldnet.att.net>
Subject: [413] Re: Jogging the Spartan Sprint
Message-ID: <2.2.16.19960703104123.27d7d868@postoffice.worldnet.att.net>

Gary: Not to feel badly. Anyone who answers a slow speed call should match the speed of the caller, contest or no. Keep up your efforts to increase speed in rec/send area and in particular emphasize developing a "good fist" -speed aint everything! Also, continue to join in the contests, they are useful as an aid to developing an "Ear" for CW.

72 y Paz ..Grover KQ4AL & Doris KE4CYE
QRP/QSLs WAS = 34 DX= XE VE
QRO/QSLs WAS = 49(-Hawaii) DXCC = 62 IOTA = 27
<SIXPENCE@worldnet.att.net>

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: WD6BOR@aol.com
Subject: [387] Re: July NorCal Meeting
Message-ID: <960703000550_569007956@emout10.mail.aol.com>

Doug,

Would it be OK if we moved the meeting to Sunday July 7th just for this month?

Look forward to seeing you there, whichever day you arrive.

Darrel

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: mykey@aztec.asu.edu (MICHAEL C. TODD)
Subject: [433] Re: mailbox empty: no QRPP
Message-ID: <9607032338.AA28676@aztec.asu.edu>

>
>The snail mail to my part of Dallas is very slow...
>still looking for the June QRPP...
>anyone else still waiting?
>72/73 dennis k3ets
>
Yes, it must be slow in Phoenix also
W9UQB Mike

--

[B[C

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Denton Larson <dlarson@ic.waseca.mn.us>
Subject: [436] Re: mailbox empty: no QRPP
Message-ID: <199607040024.TAA31780@IC.mankato.mn.us>

At 09:44 AM 7/3/96 CDT, you wrote:
>The snail mail to my part of Dallas is very slow...
>still looking for the June QRPP...
>anyone else still waiting?
>72/73 dennis k3ets
>
>
Yup, I'm waiting as well, maybe we were naughty ? ;-)

Hope it comes soon,

Everybody have a GREAT 4th !
72's Denton

WB0ZUR QRP-L #414
Denton K. Larson
dlarson@ic.waseca.mn.us
dlarson@efjohnson.com
71350.1667@compuserve.com

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Jim Eshleman <lujce@hooch.cc.lehigh.edu>
Subject: [427] Re: Missing digest
Message-ID: <96Jul3.170452-0400edt.65558-18193+106@hooch.CC.Lehigh.EDU>

>Will someone please tell me how to download yesterday's digest?
>For some reason it didn't show up today.
>Please reply direct, otherwise I won't see the answer until tomorrow's digest.

Bob,

I'm cc'ing the list in case others are in the same boat. Yesterday's digest (the one sent out early this morning) would be #408. To get a copy, send the following command, in the body of an e-mail, to listserv@Lehigh.EDU

GET QRP-L/DIGESTS 408

The last 100 daily digests are kept (#309-408 at the moment) and you can also fetch them via anonymous ftp:

<ftp://ftp.lehigh.edu/pub/listserv/qrp-l/Digests/>

73
Jim N3VXI

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: sholla@panasonic.atlanta.com (Holland, Steve)
Subject: [408] RE: Operating in wilderness areas
Message-ID: <1996Jul03.095200.1619.32853@ntserver.panasonic.atlanta.com>

Ted:

I believe if you do a little research they are referring to a station that will remain in public sight for extended periods. Such as a park

ranger ham that decided he wanted to put up a 100 foot tower at his residence in a public park. Most QRP antennas are low impact and short term so should not fall under the environmental assessment clause. If you have an operation that might be questionable such as a large scale operation using portable towers it would be a good idea to check first. I may be wrong in this definition but I am sure there others that are more knowledgeable than me. 72 de N9HXX/4

Steve N9HXX
sholla@panasonic.atlanta.com
QRP-L # 555

From: tkell[SMTP:tkell@130.253.192.68]
Sent: July 03 1996 09:39
Subject: Operating in wilderness areas

I have a question for all those QRPers that like to backpack their rigs into the woods and operate. I guess this would be members of the ARS.

A little background first. At the Dallas Hamfest, I purchased the new ARRL Extra class study guide. I noticed the following quote on page 1-7. It is the second paragraph.

There are certain conditions that may restrict the physical location of your amateur station. If the land has environmental importance, or is significant in American history, architecture or culture you "may be required to take certain actions prescribed by #1.1301 -1.319 of the FCC rules." [#97.13 (a)] For example, if your station will be located withinb the boundaries of an officialy designated wilderness area, wildlife preserve or an area listed in the National Register of Historical Places you must submit an Environmental Assesment to the FCC.

So how about it, have you operated in a wilderness area? Have you submitted the "Environmental Assesment to the FCC"? What form did you use, where did

you
get

it, and what was the result?

Inquiring minds and all that rubbish.

Ted

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [414] Re: Operating in wilderness areas
Message-ID: <Pine.SUN.3.90.960703075525.22964C-1000000@vortex.sage.dri.edu>

Hi Ted,

Well, I'll tell you my feelings about things like that.....

I have been paying taxes for about 50 years in this country and
I have proudly worn the uniform of the US Army.

No one is ever going to tell me where I can/can't go or where
I can/can't operate from on MY land.

(Yes, I do clean up my mess and not leave it behind for others and
no, I do not do things that harm the area. Think it's called
something like common sense.....)

OK, soap box off.....cul,

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: N5EM@aol.com
Subject: [423] Re: Operating in wilderness areas

Message-ID: <960703151955_427008099@emout19.mail.aol.com>

In a message dated 96-07-03 13:44:02 EDT, you write:

<< Most QRP antennas are low impact and short
term so should not fall under the environmental assessment clause. >>

I agree. As long as you pack it in and pack all of it out, I would doubt anyone would ever question you, except to show EXTREME interest in what you were doing :-)

Especially, if you are backpacking in the wilderness area. I don't think you could CARRY anything big enough to be an impact.

Ed, N5EM

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996

From: Dave.Ackrill@WESTWOOD45.powergen.co.uk

Subject: [399] Re: QRO Bigots ???

Message-ID: <960703101749Z*/G=Dave/S=Ackrill/O=WESTWOOD45/PRMD=POWERGEN/
ADMD=CWMAIL/C=GB/@MHS>

Interesting comment that you can use the suffix /QRP in the States, over here it is NOT legal. We can only use /M (mobile) or /P (Temporary location) - BTW walking along the street with a hand held rig is /M over here!!

I have had a couple of contacts with people who, after I have said I'm QRP immediately change my callsign to G0DJA/QRP, which is not what I sent. Luckily I have usually managed to complete a QSO exchange (his call de mycall) and get one back before the other station uses an "illegal" call to identify me. However, I now have QSL cards sent to G0DJA/QRP which, as I understand it, shouldn't be acceptable for DXCC - Not that I'm in any danger of getting anywhere near 100 confirmed, not even WORKED 100 yet ;-)

So PLEASE don't alter the call of the station you work, and if a UK station is sending /QRP, then strictly speaking you might say that it is a Pirate (that will drag them out of the woodwork - Firesuit on).

What is acceptable, in my opinion, is "de G0DJA <space> QRP". I have also sent "CQ QRP de G0DJA", but that invites the immediate /QRP suffix, which invalidates the QSO in my opinion.

Please note the liberal use of 'in my opinion' as that is all these thoughts are.....

Cheers de Dave (G0DJA <space> QRP)

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Jim Stafford <w4qo@America.Net>
Subject: [392] Re: QRP ARCI Quarterly
Message-ID: <31D9EEBA.2FA@America.Net>

QRP gang,

I agree this issue of QQ is the very best ever (that I can remember) and well worth the membership fee. I showed this issue around at the local radio club meeting tonight and two people joined on the spot! I have their checks in hand and the application attached to mail to WB8VGE.

Keep up the great job, Ron and QQ staff.....

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: W3HMS@aol.com
Subject: [439] Re: QRP ARCI Quarterly
Message-ID: <960703213017_230695398@emout08.mail.aol.com>

RonI like the new mission to help promote area clubs and to publish info about the clubs. This should really help the QRP movement in all its various facets of REAL RADIO.

72/73,

John W3HMS

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: "Edward J. Warhover" <kf9xy@apci.net>
Subject: [404] Re: Reflections by Maxwell
Message-ID: <199607031301.IAA07865@hilly.apci.net>

At 11:16 AM 7/2/96 -0400, you wrote:

>I wud like a copy of this book if anyone knows of where to get it, or if
>they are willing to let go of it. Thanks
>"Reflections" by: Walt Maxwell.
>72 & 73 de KE3FL/Phil

Phil,

"Reflections" should still be available from the ARRL. It's an outstanding book - the definitive book on transmission lines.

73,
Ed KF9XY

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Murray Ehrlich <mehrlich@linknet.kitsap.lib.wa.us>
Subject: [394] Re: RG-178-info please
Message-ID: <Pine.SUN.3.91.960702231730.490A-100000@linknet.kitsap.lib.wa.us>

The wire in RG-178 is silver covered copper covered steel. The jacket material for RG-178 and RG-178A is called KEL-F and I am not familiar with it. RG-178B has a jacket of fluorinated ethylene propylene. It is 50 ohm cable. Loss and power handling info:

FREQ	DB LOSS	MAX PWR
10	5.3	710
50	10.0	340

It has more loss than RG-174 but can handle more power.

73, K7AU

On Tue , 2 Jul 1996 WJ4PRandy@aol.com wrote:

> Hi gang,
>
> I have this big spool of RG-178...
>
> Its about the size of rg-174 but it is
> made with teflon materials instead of
> poly-umtiffraz...
>

> Of course, the wire is silver plated...
> (because of the teflon insulation...)
>
> Does anyone have any info :
> Loss and impedance ...etc?
>
> Thanks,
> Randy WJ4P
>

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: na5k@juno.com (Smitty Smith)
Subject: [395] Re: Using RG174 and Traveling QRP
Message-ID: <19960703.013455.4094.1.na5k@juno.com>

Thanks for all of the info on RG174.

I am going to Northern Ca. (Ft Jones) next week and I am making plans for an antenna to use with the Sierra on 30 and 40 meters.

The possibilities are: 1) a good ole long wire, 2) a 40 meter half square fed with twinlead.

I also have a 40 meter dipole that uses RG174, but this would tie me to 40 meters.

This will be my first adventure with a portable antenna. I have tested the slingshot with the spinning reel and it works pretty good.

If I put all of my qrp gear (Sierra, tuner, key, battery, antenna wire, etc) into a briefcase and attempt to take it through the airport checkpoint, will I get any grief? Are there any precautions?

Thanks,

Smitty, NA5K

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: Dan Hogan <dhhogan@lightside.com>
Subject: [440] Re: Warning Announcement [long]
Message-ID: <m0ubdNP-0004JxC@covina.lightside.com>

I like the control method.

Dan Hogan
dhhogan@lightside.com
34d 03.9'N 117d 56.1'W
QRP-L #558

From owner-qrp-l@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: bhopkins@polarnet.com (Bruce Hopkins - KL7JAF)
Subject: [420] re: Wilderness Area Operation
Message-ID: <v01530501ae0054c28c94@[204.119.24.186]>

Hi Ted....

I too have seen the paragraph you quote on wilderness area operation... If I were to apply it up here in my neck of the woods I'd be doing nothing but filling out environmental impact forms... I personally interpret it to refer to a fixed installation...

Remember:

" It is far easier to beg for forgiveness than to ask for permission "

72/73/oo's - Bruce * KL7JAF

QRP-L #380 QRP-ARCI #9061 G-QRP #9181 Norcal #1543 ARS #14
ISSB #14548 TFO #359 McPig #003 AK-QRP #1

E-Mail: bhopkins@polarnet.com
Web Page: <http://www2.polarnet.com/~bhopkins>

KL7JAF TMPS 1996 Qs=024 States=07 Confirmed=00 DX=10
States - HI CA TN WA KS AK OR
DXCC - R1F KH6 WA6 KL7 ZL1 VE7 JR7/7 UA0 VK5 V73

"Every Man should learn to play the Flute,
but not well..."

From owner-qrp-1@Lehigh.EDU Wed Jul 3 23:13:03 1996
From: faunt@netcom.com (Doug Faunt N6TQS +1-510-655-8604)
Subject: [390] Re: [335] Sarex freq.?
Message-ID: <199607030446.VAA02803@netcom3.netcom.com>

I think this is what you want.
73, doug

<http://www.gsfc.nasa.gov/sarex/sarex.html>